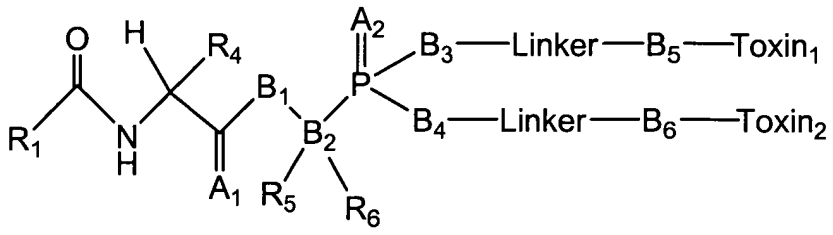
WHAT IS CLAIMED:

1. A compound having the structure:



wherein:

R_1 is hydrogen or CH_3;

R_4 is selected from the group consisting of a substituted or unsubstituted aryl group, a substituted or unsubstituted, saturated or unsaturated $C_1 - C_6$ alkyl group and $-CH_2CH_2XCH_3$, wherein X is selected from the group consisting of oxygen, sulfur and CH_2;

R_5 and R_6 are independently selected from the group consisting of hydrogen, a substituted or unsubstituted $C_5 - C_{14}$ aryl group and a substituted or unsubstituted, saturated or unsaturated $C_1 - C_6$ alkyl group;

$=A_1$ is either absent, in which case the carbon to which it was attached becomes a CH_2 group, or A_1 is selected from the group consisting of oxygen, sulfur, NH, NOH, NR_8, and CR_9R_{10}, wherein R_8, R_9 and R_{10} are independently selected from the group consisting of hydrogen and $C_1 - C_6$ alkyl;

$=A_2$ is either absent, in which case the carbon to which it was attached becomes a CH_2 group, or A_2 is selected from the group consisting of oxygen, sulfur, NH, NOH and NR_{11} wherein R_{11} is selected from the group consisting of hydrogen and C_1 - C_6 alkyl;

B_1 is either absent or is selected from the group consisting of oxygen, sulfur, NR_{12} and $CR_{13}R_{14}$, wherein R_{12} R_{13} and R_{14} are independently selected from the group consisting of hydrogen and a substituted or unsubstituted saturated or unsaturated alkyl;

B_2 is selected from the group consisting of carbon, oxygen and nitrogen, wherein, when B_2 is oxygen, R_5 and R_6 are absent and when B_2 is nitrogen, one of R_5 or R_6 is absent;

B_1 may be joined through R_{12}, R_{13} or R_{14} to R_5 or R_6 to form a saturated or unsaturated, substituted or unsubstituted ring which may contain 0 – 3 nitrogen atoms and/or 0 – 1 oxygen or sulfur atoms;

B_3 and B_4 are independently absent or selected from the group consisting of oxygen, sulfur, NH, CH_2, NR_{17}, CHR_{18}, $CR_{21}R_{22}$ and, when either $linker_1$-B_5-$Toxin_1$ or $linker_2$-B_6-$Toxin_2$ is absent, OR_{15}, SR_{16}, $NR_{19}R_{20}$ and $CR_{23}R_{24}R_{25}$, wherein R_{15} – R_{25} are independently selected from the group consisting of hydrogen, substituted or unsubstituted, saturated or unsaturated alkyl and substituted or unsubstituted aryl;

B_3 or B_4 may be joined through one of R_{15} - R_{25} to B_1, R_5 or R_6 to form a saturated or unsaturated, substituted or unsubstituted ring which contains one phosphorus atom and which may contain 0 – 3 nitrogen atoms and/or 0 – 1 oxygen or sulfur atoms;

B_5 and B_6 are independently absent or selected from the group consisting of oxygen, sulfur, OC(=O), SC(=S), OC(=O)NH, SC(=S)NH, OC(=S)NH, $N(R_{26})$ and $C(R_{27})(R_{28})$, wherein R_{26}, R_{27} and R_{28} are independently selected from the group consisting of hydrogen and a substituted or unsubstituted, saturated or unsaturated alkyl;

$Linker_1$ and $Linker_2$ are independently absent or present and if present are traceless; and,

one of $Toxin_1$ or $Toxin_2$ may be absent.

2. The compound of claim 1, wherein:

R_1 is hydrogen; and,
R_4 is $CH_2CH_2XCH_3$, wherein X is selected from the group consisting of CH_2, sulfur and oxygen.

3. The compound of claim 2, wherein X is sulfur.

4. The compound of claim 3, wherein A_1 and A_2 are both oxygen.

5. The compound of claim 4, wherein $Linker_1$-B_5-$Toxin_1$ is absent.

6. The compound of claim 5, wherein B_1 is absent.

7. The compound of claim 5, wherein B_2 is carbon.

8. The compound of claim 5, wherein B_2 is nitrogen.

9. The compound of claim 5, wherein B_3 is selected from the group consisting of OH, OCH_3, OCH_2CH_3 and OC_6H_5.

10. The compound of claim 5, wherein $Linker_2$ is selected from the group consisting of

substituted or unsubstituted allyl;

substituted or unsubstituted benzyl,

$C_6H_4CH_2X_1C(=X_2)$, wherein $X_1$and X_2 are independently selected from the group consisting of oxygen, sulfur and $N(R_{29})$, wherein R_{29} is hydrogen or $C_1 - C_6$ alkyl; and,

$(CH_2)_nN(R)C(=O)$, wherein n is 2 or 3 and R is hydrogen or $C_1 - C_6$ alkyl.

11. The compound of claim 10, wherein B_6 is absent.

12. The compound of claim 1, wherein $Toxin_1$ and $Toxin_2$ are independently selected from the group consisting of aminoglycosides, mitomycin, CC-1065, ducarmycin, cyclopropyl indole, cyclopropyl benzoindole analogs, anthracyclins, vinca alkaloids, mitomycins, bleomycins, penicillins, cephalosporins, oxacillins, carbopenems, tetracyclins, chloramphenicols, macrolides, cycloserines, fluoroquinolones (including, but not limited to, ciprofloxacin and norfloxacin), glycopeptides, aminoglycosides, peptide antibiotics, oxazolidinones, quinolones, sulfonamides, cytotoxic nucleosides, pteridine family, nitrogen mustards, polyhalogenated biaryl ethers, diynenes, podophillotoxins, taxoids, doxorubicin, carminomycin, daunorubicin, aminopterin, methotrexate, methopterin, dichloromethotrexate, mitomycin C, porfiromycin, 6-mercaptopurine, cytosine arabinoside, podophillotoxin, etoposide, etoposide phosphate, melphalan, vindesine, vinblastine, vincristine, leurosidine, leurosine, bis-(2-chloroethyl)amine, trichlorcarban, trichlorocarbanilide, triclosan, tribromosalicylanilide, sulphamethoxazole, chloramphenicol, cycloserine, trimethoprim, chlorhexidine, hexachlorophene, fentichlor, 5-chloro-2-(2,4-dichlorophenoxy)phenol, 4-chloro-2-(2,4-dichlorophenoxy)phenol, 3-chloro-2-(2,4-dichlorophenoxy)phenol, 6-chloro-2-(2,4-dichlorophenoxy)phenol, 5-chloro-2-(3,4-dichlorophenoxy)phenol, 5-chloro-2-(2,5-dichlorophenoxy)phenol, 5-chloro-2-(3,5-dichlorophenoxy)phenol, 2,2'-dihydroxy biphenyl ether, halogenated 2-hydroxybenzophenones, 2-mercaptopyridine-N-oxide, combretastatin, camptothesin, apoptolidene, cisplatin, epothilone, halichondrin, hemiasterlin, methioprim, thapsigargin, chloroquine, 4-hydroxycyclophosphamide, etoposide, colchicine, melphalan, quercetin, genistein, erbstatin, N-(4-aminobutyl)-5-chloro-2-naphtalen-sulfonamide, pyridinyloxazol-2-one, isoquinolyloxazolone-2-one, verapamil, quinine, quinidine, and chloroquine.

13. The compound of claim 11, wherein $Toxin_2$ is selected from the group consisting of aminoglycosides, mitomycin, CC-1065, ducarmycin, cyclopropyl indole, cyclopropyl benzoindole analogs, anthracyclins, vinca alkaloids, mitomycins, bleomycins, penicillins,

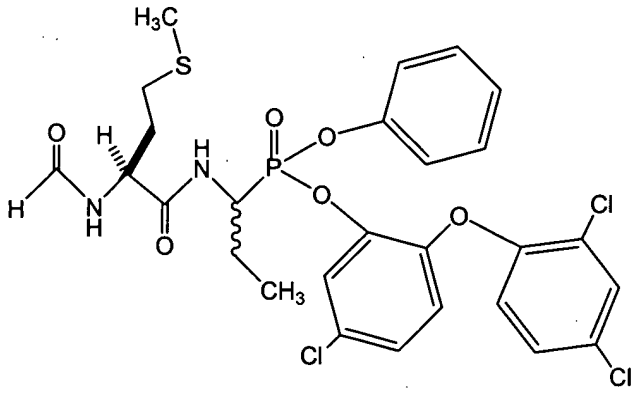
cephalosporins, oxacillins, carbopenems, tetracyclins, chloramphenicols, macrolides, cycloserines, fluoroquinolones (including, but not limited to, ciprofloxacin and norfloxacin), glycopeptides, aminoglycosides, peptide antibiotics, oxazolidinones, quinolones, sulfonamides, cytotoxic nucleosides, pteridine family, nitrogen mustards, polyhalogenated biaryl ethers, diynenes, podophillotoxins, taxoids, doxorubicin, carminomycin, daunorubicin, aminopterin, methotrexate, methopterin, dichloromethotrexate, mitomycin C, porfiromycin, 6-mercaptopurine, cytosine arabinoside, podophillotoxin, etoposide, etoposide phosphate, melphalan, vindesine, vinblastine, vincristine, leurosidine, leurosine, bis-(2-chloroethyl)amine, trichlorcarban, trichlorocarbanilide, triclosan, tribromosalicylanilide, sulphamethoxazole, chloramphenicol, cycloserine, trimethoprim, chlorhexidine, hexachlorophene, fentichlor, 5-chloro-2-(2,4-dichlorophenoxy)phenol, 4-chloro-2-(2,4-dichlorophenoxy)phenol, 3-chloro-2-(2,4-dichlorophenoxy)phenol, 6-chloro-2-(2,4-dichlorophenoxy)phenol, 5-chloro-2-(3,4-dichlorophenoxy)phenol, 5-chloro-2-(2,5-dichlorophenoxy)phenol, 5-chloro-2-(3,5-dichlorophenoxy)phenol, 2,2'-dihydroxy biphenyl ether, halogenated 2-hydroxybenzophenones, 2-mercaptopyridine-N-oxide, combretastatin, camptothesin, apoptolidene, cisplatin, epothilone, halichondrin, hemiasterlin, methioprim, thapsigargin, chloroquine, 4-hydroxycyclophosphamide, etoposide, colchicine, melphalan, quercetin, genistein, erbstatin, N-(4-aminobutyl)-5-chloro-2-naphtalen-sulfonamide, pyridinyloxazol-2-one, isoquinolyloxazolone-2-one, verapamil, quinine, quinidine, and chloroquine.

14. The compound of claim 13, wherein $Toxin_2$ is a quinolone.

15. The compound of claim 13, wherein $Toxin_2$ is selected from the group consisting of triclosan, cyclopropylindole, cyclopropylbenzoindole and derivatives thereof.

16. The compound of claim 5, wherein B_1 is joined to R_5 or R_6 to form a ring.

17. A compound of claim 1, having the structure:



18. A composition comprising:

a compound of claim 1; and,

a pharmaceutically acceptable carrier.

19. A method for the treatment of a disease caused by a microorganism expressing a peptide deformylase enzyme, comprising administering an effective amount of a compound of claim 1 to a patient in need thereof.